

## **SUSTAINABLE PROPERTIES**

### **Abstract**

This report advises on the strategy for introducing and maintaining sustainable practices in the design, construction, maintenance and management of Angus Council's non-housing estate

### **RECOMMENDATION**

The Resources and Central Services Committee is recommended to:

1. note the contents of this report;
2. approve the action taken by the Director of Property Services and
3. note that the initial cost of projects will increase but this will be compensated for by both the reductions in operating and maintenance costs during the life of the affected property and the contributions made towards supporting the Council's Environmental Strategy Action Plan and Local Agenda 21 Strategy for Angus.

## **1 INTRODUCTION**

The Property Services department has made a commitment to contribute to the Council's Environmental Strategy Action Plan and Local Agenda 21 Strategy for Angus, by introducing and maintaining sustainable practices in the design, construction, maintenance and management of its non-housing estate. Consideration is being given to adopting similar practices when undertaking works on behalf of the Housing department.

The use of sustainable building practices became council policy when the Member/Officer Group for the Environment and Quality of Life recommendations were approved at the Strategic Policy Committee of 24 June 2003, Report No 771/03.

This report detailed the contributions the department is currently making and planning to make by developing, implementing and co-ordinating its strategies for: -

- Energy Management
- Sustainable Properties
- Water Management
- Asset Management

## **2 IMPLEMENTATION**

A review of guidance available from a range of government and non-government sources, and best practice checklists, has identified that adopting a sustainable approach to the design, construction, maintenance and development of the Council's properties can be integrated into the standards and procedures adopted by the Property Services department, including Energy and Asset management, by embracing the good practice, as detailed in Appendix 1.

The department will introduce these new arrangements in two stages with the first stage being completed and evaluated before moving to the second stage. Stage 2 will be implemented immediately for significant projects being undertaken through the PPP or Design and Build procurement route.

The adoption of this approach will require adequate employee briefing, process monitoring to ensure that the practices are being employed and record keeping to demonstrate the level of achievement attained. This would enable the department to support the Council should it choose to aspire to ISO 14001 accreditation or alternative.

## 2.1 Stage 1

Establish sustainability best practice standards and procedures supported by employee briefing sessions to ensure that all managers and employees recognise the need for, and benefits of, this initiative.

- Introduce the basic concepts detailed in Appendix 1 using a range of best practice guidance as the main source of working procedures and sources of information.
- Introduce departmental Sustainability checklists, which incorporate relevant elements of the Angus Council Sustainability Appraisal Checklist.
- Introduce Whole Life Costing [WLC] as a standard Option Appraisal support tool as part of evaluating alternative options to fulfilling client requirements.
- Ensure that sustainability factors are given due weight when project design and costs are being finalised.
- Design to agreed and regularly reviewed standards, which ensure that the contributions by major refurbishment and new build projects to improving sustainability are optimised for each project.
- Encourage our contractors to contribute by adopting environmentally friendly practices.
- Undertake post-completion Performance Reviews to assess project successes and failures and allow evaluation of performance against specific departmental benchmarks e.g. energy consumption, CO<sub>2</sub> emissions and water consumption.

## 2.2 Stage 2

Introduce objective assessment methods for certain projects to demonstrate that sustainability best practice is being achieved and to permit broader internal and external benchmarking.

### Simple Projects

- Establish an objective sustainability evaluation process to enable the Whole Life Costing approach to Option Appraisals to become more comprehensive.
- Introduce additional National Key Performance Indicators to complement those already in use.

### Complex Projects

- Introduce advanced benchmarking through formal Environmental Assessment schemes such as BREEAM or SPeAR
- Evaluate performance against national benchmarks.

## 2.3 Liaison

The Property Services department participates in regular discussion with neighbouring and other authorities on a range of topics to establish and implement best practice standards. It has attended a number of discussions about Sustainability, Biodiversity and Energy Management and introduced changes in standards and working practices as a consequence. It is intended that these arrangements be broadened to include client departments and other organisations to ensure that future strategies are well informed.

## 3 FINANCIAL IMPLICATIONS

Introducing and maintaining sustainable practices in the design, construction, maintenance and management of the Council's non-housing estate will, through Whole Life Costing, encourage more detailed consideration of the costs associated with the use of properties post-construction and the benefits of improving design and construction standards.

It is likely that the initial cost of projects will increase but this will be compensated for by both the reductions in operating and maintenance costs during the life of the affected building and the contributions made towards supporting the Council's Environmental Strategy Action Plan and Local Agenda 21 Strategy for Angus.

## 4 HUMAN RIGHTS ACT IMPLICATIONS

There are no Human Rights Act implications specific to this report.

## 5 CONSULTATION

The Chief Executive, the Director of Law & Administration, Director of Planning and Transport, and the Director of Finance have been consulted in the preparation of this report.

## 6 CONCLUSION

The Resources and Central Services Committee is recommended to note the contents of this report; approve the action taken by the Director of Property Services and note that the initial cost of projects will increase but this will be compensated for by both the reductions in operating and maintenance costs during the life of the affected property and the contributions made towards supporting the Council's Environmental Strategy Action Plan and Local Agenda 21 Strategy for Angus.

## REFERENCES

<u>Committee</u>	<u>Date</u>	<u>Report No</u>	<u>Subject</u>
Strategic Policy	24 June 2003	771/03	Environment and Quality of Life
Policy and Resources	23 October 2001	1202/01	Energy Management Updated Strategy And Future Funding Arrangements
Policy and Resources	09 September 1997	917/97	Energy Management - A Corporate Commitment

Appendix 1 Sustainable Properties – Best Practice

**BACKGROUND PAPERS**

No background papers, as defined by Section 50D of the Local Government (Scotland) Act 1973 (other than any containing confidential or exempt information), were relied on to any material extent in preparing the above report.

M G Lunny  
Director of Property Services

## Appendix 1 Sustainable Properties – Best Practice

### Planning

- Reuse land. Treat contaminated land on-site. Reuse buildings.
- Plan the footprint of the building with ecological features in mind.
- Site buildings in locations, which are accessible by a range of travel modes including walking and cycling. Consider how building users will travel to and access facilities and amenities nearby.

### Design

- Appraise options using whole life costing.
- Design for accessibility.
- Design for minimum waste of materials. Provide facilities for the minimisation and management of waste.
- Protect and enhance biodiversity. Ensure natural features can be easily managed and maintained.
- Specify local and low environmental impact materials (e.g. use A-rated specifications [most environmentally friendly materials] from the Green Guide or equivalent and timber from certified well-managed forests).
- Optimise passive energy use (e.g. solar gain). Minimise energy use (e.g. lighting, heating/cooling, ventilation, insulation). Consider solar water heating, wind turbines, water turbines, biomass and photovoltaics. Install systems that minimise electricity consumption. Select the most appropriate fuels for heating. Design to achieve the best DETR Benchmarking standard. Consider heat recovery.
- Consider CHP and renewable energy sources. Fit sub-metering and intelligent building monitoring systems.
- Specify flexible information and communication services.
- Ensure high indoor air quality through effective ventilation, and specifying materials, finishes and cleaning products with minimal harmful effects.
- Specify zero ozone depletion and low NOx systems and materials.
- Ensure fittings are low water volume. Consider rainwater and grey water recycling. Consider permeable design for hard landscaping. Fit sub-metering.
- Discourage single-occupant car use, through public transport and cycling provision, making the development safe and secure, providing showers and changing rooms.
- Consider ease of operation and maintenance through commissioning time and documentation.
- Consider day lighting, ventilation, humidification, personal control, and space for well-being and comfort.
- Design for flexibility or deconstruction with minimum waste.

### Construction process

- Manage for minimum waste. Reuse waste on-site.
- Protect and enhance existing ecological features (trees, hedges, ponds etc.).
- Minimise air pollution (dust and fumes) and noise pollution.
- Minimise water use during construction, and guard against pollution.
- Consider transport to and from site. Consider energy use through plant and site services.
- Maximise opportunities for local businesses, labour and training.

### Finished product

- Manage building systems, ecological features and waste for maximum efficiency considering the design.
- Use post occupancy evaluation and feedback. Consider maintenance, operational (energy, water etc.) and staff costs. Maximise satisfaction and productivity through a healthy environment. Encourage community use of buildings
- Follow the design criteria for maintenance, repairs and refurbishment.